PDR RID Report

Originator CHANG, ED **Phone No** 286-6964
Organization 421
E Mail Address edward.chang@gsfc.nasa.gov
Document FOS Design Spec

RID ID **PDR** 87
Review FOS
Originator Ref DR2
Priority 2

Section 5.1.2.1.1 **Page** NA **Figure Table** NA

Category Name Design **Actionee** HAIS
Sub Category
Subject Activity Constraint Checking

Description of Problem or Suggestion:

In looking at your design, I do not see where constraint checking between activities (e.g., "don't allow MISR to go into local mode while ASTER is pointing") is accommodated.

Originator's Recommendation

Include this requirement in your design if it is not there.

GSFC Response by: **GSFC Response Date**

HAIS Response by: D. Herring **HAIS Schedule** 1/13/95
HAIS R. E. B. Moore **HAIS Response Date** 1/19/95

The class FpRmSpacecraftComponent performs constraint checking between instruments (and subsystems) through the function "CheckValidModeTransition()". Each of the EOS instrument classes and spacecraft subsystem classes are derived from FpRmSpacecraftComponent, so they contain this constraint checking capability. Therefore, when a user attempts to schedule an instrument into a certain mode (e.g. MISR in local mode from 10:30 to 11:00), the FpRmInstrument class checks to make sure this is a valid mode transition (e.g. verify ASTER is not slewing from 10:30 to 11:00). Refer to section 5.1.2.1.1 of the PDR Design Spec for additional details.

Status **Closed** **Date Closed** **2/1/95** **Sponsor** **Johns**

****** **Attachment if any** ******